

IN THE CLAIMS:

1. (Currently Amended). A Method for the manufacture of a nucleic acid molecule comprising the following steps:

- a) providing a first at least partially double-stranded oligonucleotide, whereby the oligonucleotide comprises a first and a second single-stranded overhang,
- b) providing a second at least partially double-stranded oligonucleotide, whereby the oligonucleotide comprises a recognition site for a first type IIS restriction enzyme which cuts outside its recognition site, a modification allowing the oligonucleotide to be coupled to a surface and a single-stranded overhang,
- c) ligating the first oligonucleotide and the second oligonucleotide via the first single-stranded overhang of the first oligonucleotide and the single-stranded overhang of the second oligonucleotide, generating a first ligation product, whereby the first ligation product comprises a single-stranded overhang essentially corresponding to the second single-stranded overhang of the first oligonucleotide,
- d) cutting the first ligation product with the first type II restriction enzyme thus releasing
 - an elongated first at least partially double- stranded oligonucleotide having a first and a second single-stranded overhang, whereby the first single-stranded overhang is generated through the cutting of the restriction enzyme and whereby the second single-stranded overhang corresponds essentially to the second single-stranded overhang of the first at least partially double-stranded oligonucleotide, preferably the at least partially double-stranded oligonucleotide of step (a), and
 - a truncated second at least partially double-stranded oligonucleotide;

- e) immobilising the truncated second at least partially double stranded oligonucleotide of step d), the unreacted second at least partially double-stranded oligonucleotide and/or the uncut first ligation product via the modification to a surface;
- f) optionally repeating steps a) to e), whereby the elongated first at least partially double-stranded oligonucleotide of step d) serves as the first at least partially double-stranded oligonucleotide in step a).

2. (Currently Amended). The method ~~according to~~ of claim 1, comprising the following step

- ca) immobilising the first ligation product via the long single-stranded overhang to a surface,

3. (Currently Amended). The method ~~according to~~ of claim 2, wherein the surface comprises a nucleic acid having a single-stranded stretch which is at least partially complementary to the single-stranded overhang of the first ligation product.

4. (Currently Amended). The method ~~according to any of claims 1 to 3~~ 1, 2 or 3, comprising the following step

- cb) optionally washing the immobilised first elongation product; and
- cc) releasing the immobilised first elongation product from the surface.

5. (Currently Amended). The method ~~according to any of claims 1 to 4~~, wherein the length of the first single-stranded overhang of the first at least partially complementary oligonucleotide has a length of 1, 2, 3, 4 or 5 nucleotides.

6. (Currently Amended). The method ~~according to any of claims 1 to 5~~, wherein the second single-stranded overhang of the first oligonucleotide allows for a stable hybridisation to the single-stranded stretch of the nucleic acid comprised on the surface.

7. (Currently Amended). The method ~~according to~~ of claim 6, wherein the hybridisation is stable under the reaction conditions of step cb).
8. (Currently Amended). The method according to any of claims ~~1 to~~ 7, wherein the single-stranded overhang has a length from about 5 to 20 nucleotides, from about 10 to 20 nucleotides, from about 15 to 18 nucleotides, from about 5 to 10 nucleotides and from about 6 to 8 nucleotides, depending on the nature of the nucleotides.
9. (Currently Amended). The method ~~according to any of claims 1 to~~ 8, wherein the modification is a biotin modification.
10. (Currently Amended). The method ~~according to any of claims 1 to~~ 9, wherein the immobilisation of step e) occurs via interaction of the biotin and the surface, whereby the surface preferably comprises a biotin interaction group.
11. (Currently Amended). The method ~~according to any of claims 1 to~~ 10, wherein the biotin interaction group is selected from the group comprising avidine, streptavidine, extravidine, mutants of each thereof and synthetic biotin binding sites.
12. (Currently Amended). The method ~~according to any of claims 1 to~~ 11, wherein a part of the nucleic acid to be manufactured is part of the elongated first at least partially double-stranded oligonucleotide.
13. (Currently Amended). The method ~~according to any of claims 1 to~~ 12, wherein steps a) to e) are repeated at least once, whereby the nucleotides transferred from the second and any further at least partially double-stranded oligonucleotides provided in step b) to the first at least partially double-stranded oligonucleotides are the nucleic acid to be manufactured or a part thereof.
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